Information Literacy: A Perspective From Chile

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1. INTRODUCTION

For the purposes of this paper, I have accepted the working definition of information literacy proposed by the Prague meeting organizers as a beginning point. However, I then proceed to qualify that baseline definition, taking into account the many unique activities, policies, and circumstances that are leading Chile rapidly into the Information Society, based on my own personal experiences and those of my colleagues.

Ultimately in this paper I will come to define Information literacy as:

> The right of individuals, throughout their lives, to practice and acquire systematically the capability to recognize their need for information, to find it, to select it from many alternative sources, to evaluate the source(s) from which it was retrieved, to learn how to use it, to organize it, and, finally, to interpret it in order to respond to their everyday life concerns.

I agree with the sociologist Manuel Castells[ii] that the Internet is a "new social order and a malleable technology, susceptible to be deeply modified by social practice, leading to unsuspected social outcomes to be discovered by experience." Therefore, I see that public policies must be geared to making Information literacy a central activity, and to educate people to become information literate on a very large scale, but flexible enough to accommodate unforeseen changes. A clear national goal and a flexible approach of this kind are quite suitable for motivating both national and global collaboration, and the intensive exchange of information literacy experiences worldwide. My analysis of this subject is derived primarily from my personal job and professional experiences, and those of my colleagues, in the practice of librarianship and information management in Chile.[iii]

2. CHILE'S TRANSITION TO AN INFORMATION SOCIETY

Chile is a Spanish-speaking country with 16 million inhabitants, an export-economy dependent mainly in non-manufactured goods, and a steady, sustained growth rate. The country has a very diverse geography and climate. It is geographically remote, even in

South America, and isolated between the Pacific Ocean and the Andean Mountains, at the very tip of South America. Chile has undergone, in the last twenty years, a progressive transformation to become a full, free-market economy, but with important shortfalls in the modernization of many kinds of public services. Like most other developing countries, a common ground for all political parties has been the reduction of poverty, raising the quality of education, diminishing the level of unemployment, and increasing economic growth. Within this framework, many strategies and programs have been set into motion.

Chile has had a spectacular growth rate compared to other Latin American countries due to deregulation policies in the information technology and telecommunication sectors (ITC) in the early 1990's. Moreover, it has kept the per capita lead in the region in the ITC sector. ITC government policies in Chile set the framework, in an open market atmosphere, for the design, development, and installation of a national information and telecommunications infrastructure by the private sector. Many private companies compete for the Internet market, with excellent results experienced by most of the new entrants. However, adequate available bandwidth is still a very big problem.

By the end of 2001, Chile held the highest Internet per capita rank of all Latin American countries, with a 21% penetration index. Compared to developed nations, Chile appears in the 2001 Information Technology Absorption Index [iv] (a widely used economic yardstick) with a rating of 35.2, compared to 144.9 for the USA and 74.9 for Korea.

Another commonly used international measure, the TIMMS, which shows how well prepared people are for entry into the Information Society, Chile, in 1999, was in the 35th position out of 38 countries in Latin America. This measure captures information related to what modern information and telecommunications resources people have in their homes, such as a personal computer, an Internet connection, calculators, books, encyclopedias, and so forth.

Today at the national level there is a strong new focus on creating an e-government, including services provided by such agencies as the Internal Revenue Service, with whom Chileans must now file their tax returns online using the Internet. This e-government program has necessitated many major changes by many different levels of institutional, as well as fundamental changes in personal habits. Two very recent measures will enable an even greater leap into the e-government era:

(1) the use of digital signatures and its promise for facilitating business-to-business and business-to-government commerce, and

(2) a business-to-government ("B2G") strategy for making public purchases.

Government initiatives such as the elimination of tariffs for computer imports, public bids to create small Infocentros (infocenters), and extensive publishing of government information on the Web have also been strong driving forces to push the country's move to e-government. Other new practices are being pilot tested, and they are slowly presenting a brand new set of electronically-based choices for citizens and businesses to deal with

everyday challenges, and thereby offering many new business and citizen social and economic opportunities.

In public education, Chile has increased its expenditure since 1996 from approximately 2% to 7 % of the gross national product GNP. One of the main features of the educational reforms taking place is the implementation of "Enlaces," [v] a program geared to strengthening education and informatics initiatives nationwide. For example, with contributions from ITC companies, 5000 public schools have set up small centers equipped with computers and Internet connections with a 1 to 60 computer-to-student ratio. Teachers as well as children have been extensively trained in computer literacy and media literacy, although changes in teaching and learning pedagogical methodologies have not changed all that radically.

On the content side, Educar[vi] a pilot educational portal funded by public and private funds, drawing from an Argentinean experience, provides information, access to other resources, and shared quality experiences to Chilean practitioners. The portal also promotes interactive communication and collaboration among students, family, teachers, researchers, education experts and school administrators. However, lasting positive results on the community are not yet known because the pilot program is still in its initial year.

However, as mentioned, these rather isolated initiatives, however commendable they are individually, are frustrated and offset to a significant degree by the country's low computer per capita index, rapid IT obsolescence, poor bandwidth availability, and lack of good school libraries and school media resource centers. As a result, the traditional practices, programs, and curriculums pursued by the educational sector have not changed as much as they could and should be. The type of educational changes and reforms needed for students to participate on the national (much less the global and regional stages) have not yet taken place. Students are still exposed mainly to a classical education, with few opportunities to become autonomous, self-starting learners and practitioners. Moreover, the slow transformation pace of teaching and learning policies, practices and curriculums in the public sector is producing an emergent culture of passiveness on the part of several of the key players: government, secondary and higher level schools, teachers, and staff.

At the same time, there is increasing competition among higher education institutions, nationally, regionally, and worldwide, to offer e-learning, distance education, and related Internet-based alternatives. These institutions also provide information services and products through the Web to countries, often at marginal costs. They offer a variety of certificates, diplomas, and degrees, through e-learning and distance education, which collectively constitute a new set of permanent education and self education choices.

But there are many questions that must be asked at this early stage. For example:

- Will these new global, regional and national Internet-based programs be suitable for students across the world, without a more direct and meaningful tie-in to their respective cultural settings and backgrounds (i.e. as opposed to a "one size fits all" philosophy)?

- What are the prerequisites that enable satisfactory performance, completion, and achievement, and what are the benchmarks and indicators of progress in achieving those levels and that ultimate goal?

- If students are information literate, would they then have political, economic, and social advantages, and, more precisely, just what would those advantages be and how much would they be worth in terms of monetary cost as well as social value and benefit?

In the last five years new strategic directions are radically improving the services provided by public libraries nationwide in Chile, but they are still weak social institutions in terms of the strength of their underlying infrastructure, the excellence of their collections, and the quality of their human resources. Three hundred and forty public libraries in Chile have received a Gates donation that will allow them to become an integral part of a national network (the Red de Bibliotecas Públicas para el nuevo Milenio).[vii] They will serve as community centers and local content providers, focusing their attention on the individual's information needs. However, the personnel staffing at these centers does not usually include professionally trained librarians. The staff comes mostly from the same community, and has little or no higher education. Despite these shortcomings, they will be trained to become change agents for their communities.

A public service financed through public and private funds, as well as user fees, is Vitanet,[viii] created as a technological center and library by one of the municipalities in Santiago, Chile. It is both a physical place and a virtual site for adults and children to use—providing innovative services that are continuously refined and adapted to the needs of people.

Community-based centers, oriented particularly to economically deprived sectors, are looking for ways of being more effective to their communities, and are experimenting with different modalities of interaction with their clienteles. For example, CDI Chile[ix] is teaching computer literacy from the perspective of responding to the everyday concerns of an individual. For example, if the need is to send a letter to a mayor, the centers' staff teach patrons how to use not only the computer, but word processing tools as well. The CDI has extended its activities through a joint venture with a nonprofit foundation Pais Digital,[x] which is oriented to promoting public policies and actions designed to diminish the so-called Digital Divide.

Another example is the Red de Information Comunitaria de la Araucanía,[xi] which is an ethnic community informatics project in the south of Chile, in the territory of an ethnic group called the Mapuches. Universidad de la Frontera has developed thirteen telecentres with Internet access, through public funding, and established services to respond to the concerns of the people, identified by surveying them in local bus terminals.

In Santiago, in two socially deprived boroughs, El Encuentro,[xii] a private initiative of young, highly motivated and committed citizens, is financing its two centers with private donations and using volunteer work. It is planning to eventually form a network comprised of six centers. El Encuentro has a community radio, Internet training programs, jobs

opportunity services, and also offers various products and services that have been produced by entrepreneurs living in the community. Youngsters have the opportunity to work for the center in exchange for Internet access, and/or the possibility of being trained (perhaps as Web designers or technical assistants) and work in the new electronic medium.

3. HOW DOES INFORMATION LITERACY FIT INTO THE CHILEAN EQUATION?

As already mentioned, many ordinary people are working in computer centers with their respective communities. They are slowly evolving their programs and approach to be more responsive to the everyday, specific concerns and needs of users, but with no specialized training and with little formal education. Their dedication is praiseworthy, and is being undertaken out of a spirit of public service, a kind of electronic public service job corps. These workers are, quite literally, learning by experience, and adapting their tactics and methods to the unique needs of the constituencies they serve.

However, information literacy, with minor exceptions, does not exist—either as a vision or as a program of action anywhere in Chile. Certainly, information literacy is not widespread, nor are methodologies in place to address this issue in a proactive and meaningful way. Perhaps it is because so many of the country's leaders are, themselves, not very information literate even if they may be modestly computer literate.

Though the various community, computer, and telecenters identified above are organized in close networks institutionally, they are not often connected with libraries. Therefore, they do not share the visions, the values, and the shared experiences that come from the library profession and the library tradition.

A few of the country's largest university libraries are the only institutions that are undertaking information literacy programs in a concerted way in order to educate people. In addition, even in those few cases, those initiatives and programs are rarely even identified as "information literacy" programs. A good example is the Library System of the country's Catholic University (Pontifica Universidad Catolica de Chile) that, over the span of twenty years, has developed information literacy programs using electronic slide shows, videos, and computer-assisted lectures. In so doing, the University implicitly employs its expertise in modern, interactive, electronic educational tools (in partnership with the traditional academic[xiii] methodologies) to deliver its educational products to students.

Orrego and Araya[xiv] claimed in a recent study commissioned by the United Nations Development Program (UNDP) that Chile is has, irreversibly, entered into the Information Society because of the many Internet private and public initiatives that have been put in place. However, they point out that "digital gaps" exist in terms of poor access to, and poor management of infocenters and Web services. They conclude that the success of community Internet centers is not so much correlated to the amount of resources allocated, but rather to an overall poor planning. They claim such plans do not adequately consider user training and interpersonal interactions with, and feedback from the individuals served. A second conclusion they draw is that government is the main provider of content on the

Web, but is too often providing static information resources. That means the resources are not kept up to date, they rapidly obsolesce, and they are often taken down without public warning. However, the authors note that some progress is now discernible.

In short, too often even the country's few, nascent Information literacy policies and programs (whatever they may be formally labeled) have not been sufficiently customer oriented, nor have they been coordinated so that they are mutually reinforcing. Unfortunately, the policies and programs are isolated. These public policies and programs seem to have been conceived in a vacuum, showing little real understanding of the people's concerns and information needs.

In other words, strategies have been formulated that are not user oriented, and have been applied as if technology, all by itself, could wipe out poverty, computer illiteracy, and lack of Internet access. Oftentimes policies seem predicated on a few, misguided, "grand assumptions" such as:

- technology will, somehow, solve all educational, and all national structural development problems;
- libraries will be replaced by the Internet; and
- Web sites should be limited to static information.

We must squarely confront these misconceptions and incorrect assumptions if the country is to build a new set of sound new information literacy policies and practices that are comprehensive and integrated and geared toward a different future.

As a result of my discussions with many Chilean government officials at different levels, non-government organizations, and private institutions (including private companies), I can say that information literacy, at the moment, neither exists as a concept, much less as an identifiable professional practice. Nor is the notion perceived or discussed as a basic right of citizens. Information literacy is not in politicians' lexicon or on the private sector's agenda.

Therefore, it is critical to address the misguided assumptions that are frustrating the formulation and implementation of enlightened information literacy policies and programs. We take them in turn.

3.1 To Reduce Poverty, Eradicate Disease, and Improve the Quality of Life, We Must Alter the Popular View of How the Internet Can and Should Be Used

Manuel Castells: Horizontal Networks and the Influence of the Internet

Manuel Castells' sociological view of the "Internet Galaxy" provides a basis for the argument that (a) the Internet more than a global telecommunications network and infrastructure, (b) a new social order based on "cyberspace" rather than physical space has

emerged, (c) and the Internet in itself cannot end social fragmentation or inequality. Furthermore, the Internet is a "malleable" technology (flexible, dynamic, expandable) that is can be continuously modified by "social practice."

Castells suggests the Internet is a paradigm shift that has replaced vertical connections (such as those in centralized organizations and interpersonal networks) with horizontal connections (based on flexible, fast, and adaptive network connections). This horizontal structure has emerged in response to the needs of the new fast, flexible, and global economy, and the demands of societies in which individual freedom and communication is valued.

The Possibilities of Social Networks and Information Sharing on the Web

These views open a range of possibilities that are destined to come from practice and experimentation, rather than from rigid, pre-conceived mental propositions, theories, or hypotheses. Internet is a unique medium in the sense that working with it allows one to learn by personal experience rather than by traditional classroom instruction and the rote memorization of theories and historical anecdotes. In short, learning via the Internet embodies the essence of the learning process itself.

It is important to note that Internet is not only changing our established ways of doing things, but also is changing our standards for providing and accepting services. We can readily see how new technologies, such as the digital medium, have transformed video, sound, images, and texts, produced in many different and often incompatible formats, into one "unified" digital format that can be transmitted throughout the Internet.

The Internet medium has opened a wholly different way of dealing with both natural and man-made artifacts. As ordinary lay people, we can, for example, easily publish, print, communicate, and store information, and create new information products and services at a very low cost. We can build our own digital libraries.

We saw this in the Napster software, which (setting aside for a moment the legal intellectual property questions) was a worldwide collaborative phenomenon, wherein people shared private music libraries through the Internet. Music lovers created their own "free" music collections, using their own software and methodologies at very low cost. Additionally, they were able to participate in a dynamic and interactive new “cyberspace” niche activity, which changed drastically the entrenched practices in the music retail industry.

This Utopia, however, was short-lived, and lasted only until Napster was declared unlawful because of the invasion and theft of intellectual property rights under international copyright laws and conventions. But the experience did prove that a worldwide social network, driven by a strong common interest and advanced technology, could provide the sharing of assets for personal and community benefit. The Napster affair was a whole new experience that challenged the traditional definitions and regulations relating to copyright, and the ways authors and companies are compensated for their work, in a way that no pre-Internet Age collaboration could ever have done. In my view, it was a success from a

social experimentation standpoint, even though, in the end, it did not succeed for legal reasons.

Interactive communication and leadership, centered on the needs and concerns of particular ethnic groups, boost community power. The Internet has meant empowering local community groups so that they can make more effective public demands. To mention but three examples:

- **Chiapas**: An indigenous group in Mexico fighting for their rights bypassed instructions imposed by the central government through the Internet resulting in a gain of political power and identity worldwide, which, in turn, afforded them even more power to negotiate their demands;

- **Afghanistan:** Where two isolated cultures "interbred" their values, thereby provoking cultural clashes that led to a partisan war involving many of the world's most powerful nations; and

- **The Mapuches**: A Chilean ethnic group seeking land recovery, which according to analysts, has greatly increased their power and raised their level of interaction, and widened their publicity efforts, and thereby enhanced and elevated their sense of national identity.

In short, well-organized virtual local communities can put in place new, or augment existing Cyberspace "niches of possibility" and strengthen ties and relationships at higher societal and economic levels, thereby sometimes provoking cultural clashes and competition, as well as establishing new standards and thresholds of national and public activity.

In this new social order, an experienced citizen is confronted by dynamic "cyberspace" niches that alter long-established conceptions for both commercial and public services. Speed, utilizing iconic language for communication, home delivery "just in time" (and in the right amount) are the highly valued variables.

However, we cannot ask the Internet to be more than a society itself. The Internet brings together a whole array of considerations, and juxtaposes them into sharp focus. These include calling into question traditional assumptions, dealing with real or perceived threats such as computer hacking and network vulnerability, and attendant social and economic difficulties and opportunities. In many areas, and especially in the library world, some people have felt menaced and others emboldened by the thought that technology and the Web might eventually replace librarians and libraries altogether.

The author believes that those who feel threatened are making an incomplete and incorrect assessment of the role that the librarian, archivist, records manager, and other information professionals can play in the Internet Age. After all, each of these information professions has a role as a very sophisticated information gatekeeper that will be enhanced, not diminished, in the Information Society. I agree with Bell's[xv] contention that computers

cannot replace the essential role of information professionals. Computers cannot invent the future, listen sympathetically to human concerns, or make and fulfill promises.

For most of the nations of the world, the Internet is becoming a public commons in "cyberspace"—although it is primarily in English and has many mysterious zones, forbidden places, and difficult paths. Information retrieval capabilities are steadily improving, heuristically to be sure, rather than driven by well-conceived information literacy public policies and programs. However, these steps are still very far from becoming routine, convenient, and easy to use. Too many information seekers online still cannot distinguish value from "trash." Copyright law revisions being proposed attempt to protect author's rights by changing the revenue model from a "pay per book" fee to a "pay per use" fee. Political power and economic considerations have delayed the new order in publishing for which all information professionals are patiently waiting.

In its continuous movement toward improvement—streamlining, simplifying and speeding up—the Internet is allowing for new possibilities that were largely unforeseen. For those who are lucky enough to have access to it, the Internet is a real boon. But for those that do not have access, government must serve as an intermediary and a helper, sometimes even a subsidizer.

At the end of the day, there is a nagging question: How can we present the Internet in a way that it appears to everyone as a ready and easy-to-use means of empowerment? This is another key reality that must be addressed.

4. RETHINKING THE WORLD AFTER 9-11[xvi]

The occidental world is not the same anymore. We are still seeing the consequences of that infamous day in New York City ripple through our lives. First hand, we are learning that there is a massive reapportionment of investment funds and capital to other priorities such as national, local, and personal security, which will inevitably affect the traditional patterns of industrial production of good and services. The telecommunications, food production, tourism and other sectors are notable examples of these massive economic shifts and dislocations. Feeling unsettled and uneasy about the future are prevailing human moods in a world in seemingly permanent flux, where we are constantly driven to make decisions on what to change or what to keep.

Building our own set of dependable and reliable tools to become a better observer and practitioner, helps us cope with a world of unexpected turbulence and unpredictable outcomes.

In short, the 21st Century phenomenon of terrorism is driving out entirely, or severely constraining many human values that have been cherished by mankind throughout its long heritage, including considerations of privacy, fair play, equitable access to information, due process of law, and many others. This is the reality of the world in which we live, and to ignore the reality is to do so at our own peril.

5. BUILDING THE FOUNDATION FOR ENLIGHTENED INFORMATION LITERACY PUBLIC POLICIES

A public policy is an intervention in the lives of citizens, sometimes for the better, sometimes for the worse. An enlightened public policy dealing with information literacy should change the actual style and background practices in information seeking and use, which eventually will produce social change and reconfigure the culture. Simply proclaiming a policy, all by itself, does not mean change will take place. For that to happen, a critical mass of positive energy is required to override disharmonies, and ensure the adoption of a new way of doing things that becomes useful and central element in peoples' lives.

If we can come to see citizens as clients, and not just members of a society in the abstract sense, we can establish responsive policies and actions that are customized to each particular audience. People are "living experiences," particularly those experiences related to the network society. Those experiences affect their everyday lives in a very personal way, and must be taken into account in building a useful public policy.

We have to frankly acknowledge that people are living with local, regional and global influences concurrently, and experiencing services through the Internet that modify their standards for services at the local level. People know they live in culturally diverse and unbalanced societies with great inequalities of natural resources. Many such communities, for example, are comprised of populations of which only 10% (or even less) is wired. They fear not being able to be a part of the promise of the Information Society because they cannot do it themselves, and they need intermediaries and helpers, but those resources are not readily available and accessible. In addition, these intermediaries and helpers, such as public social organizations, are a quite scarce and unevenly dispersed resource. Yet, they are a key change agent in much of the developing world, and are surrogate for direct citizen action.

At the same time, early adapters to the Internet are acquiring new habits to read and write digitally, which opens up for them many new opportunities. In the information world there is an explosive and complex world of digital information that is Internet centered, but is largely English language driven, thereby calling for a permanent awareness of and continuous utilization of the new technology just to keep abreast.

There is also a general sense that Internet will provide everything, and answer every question. This is another widespread misconception that must be confronted. People are not generally aware that Web information appears and disappears daily, that much information is self-published without benefit of editors or reviewers or any kind of peer evaluation. Retrieving a superabundance of information with no means of assessing its value is virtually useless.

5.1 What can information literacy do for people?

Information literacy can provide many advantages to ordinary citizens. Here are five strategic advantages.

Enhancing Social Capital

Providing the capability to recognize when information is needed, building strategies to find, select, analyze, organize and use the information, thereby providing people with a permanent new tool and internalized resource which they can utilize throughout their lives, to choose with freedom and without fear.

Broadening Self-Identity and National Identity

Providing the means for citizens to be a useful and integral part of a global world, understanding its many complications and variables, coping with information needs and concerns, all create a less selfish and more altruistic self- and national identity. In short, people become citizens of the global community, not just the State or the local community.

Creating a Personalized Future

The Internet is enabling people to participating very directly in the electronic marketplace. E-bay is a good example, where millions buy and sell, usually small products and services, affording them great pleasure and a supplementary income. This new electronic marketplace gives people the potential to change their everyday lives and design a new personalized future.

Self-Empowerment

Reading and writing digitally, participating in networks, understanding the world in terms of its many global connections, being entrepreneurs of profit and non-profit organizations, all empower the individual.

Capability to Change and Adapt

Being exposed to multiple situations, and the thoughts and actions of people living in many different cultures, helps people to become more tolerant and less arrogant, accept cultural diversity as a positive instead of a negative phenomenon, and the capability to adapt themselves rapidly to different contexts and circumstances. In short, a form of social mutation is taking place.

6. SEARCHING FOR A CENTRAL PUBLIC POLICY FOCUS FOR INFORMATION LITERACY

A program on information literacy is affected today by a variety of Internet-driven complexities related to human beings and their emotions. Most of these have a positive, "driving force" element as well as a negative, "constraining force" element. They include:

- the rapid proliferation and dispersal of the new ICT technologies;
- the progressive sophistication of information resources becoming electronically available and accessible, and their wide distribution, especially digital products and services;
- the new tools and practices being acquired by people to find and use information;
- the "unfiltered" distance learning and lifelong learning educational programs becoming available;
- the quality and quantity of public domain information that is self published;
- the cost and accessibility of private domain information;
- the culture of cut and paste, hypertext, and instant communication;
- the restrictions and possibilities of powerful information retrieval tools, search engines, and browsers;
- the challenge of uncataloged resources and gray literature; and
- the barriers of language and the presence of non-digital media.

Enlightened information literacy policies should take into account that Internet must be seen as a core element of the social and economic infrastructures of all nations (not to mention their political infrastructures). It is absolutely crucial that countries become inter-connected, and that the distinctive Internet property that Castells calls "malleability" will lead to outcomes that we cannot foresee at the moment. However, that does not mean we are frozen into a state of perpetual anxiety and fear.

Creating effective public policies in information literacy from a user perspective will inevitably lead countries to address how to take care of training information literate citizens. However, the education and training policies should not be promulgated in a vacuum. They must be carefully inter-related with other overarching political, economic, and social policies that are part of the country's strategic fabric.

Meaningful information literacy policies also need to address and deal squarely with the idiomatic barriers and the problems the Internet is posing for non-English speakers. Today, a great deal of the most important information is created in English and is seldom translated.

Another important feature to take into account is related to the way people live their everyday lives. What are their beliefs, concerns and problems? Public policies must be based on, and adjusted from, continuous feedback from citizens. Some of these factors are:

1. Education is the key means to ensure a better future, but not everybody has fair and equitable access to education;

2. Using information effectively and becoming a well-informed person provides one with many opportunities, but material wealth, political power, and social status are still perceived as the main gateways to opportunity by most cultures and societies;

3. To become a permanent learner one has to acquire skills for self-education. It is difficult to master information and communication technologies, but such mastery is absolutely essential to guarantee a better present and future;

4. Through reading one can think reflectively, and obtain power, but doing so is often expensive and requires patience and perseverance;

5. Having the insight to understand one's own identity at the local level as well as at the national and global levels, provides self-assurance but requires specialized training;

6. Having status and identity and being able to transform oneself throughout life requires actions that are beyond the understanding of most ordinary people;

7. Acquiring the capacity to observe "weak signals" is a way of being able to see the future from the past, and articulate the present, but this capacity is not intuitive and requires specialized training; and

8. Participating in, and creating new communities is a way of self-empowerment, requiring frequent communication and agreement on common goals.

7. THE ROLE OF LIBRARIES BUILDING AN INFORMATION LITERACY CULTURE

Libraries are, and always have been the premier social institution dealing seriously, and in a scholarly way, with information literacy, although the term is recent. Libraries therefore have a special role and responsibility to advance the concept based on a very visible and positive identity with patrons. Professional librarians, library assistants, subject matter specialists, computer and software engineers, educators, sociologists, and historians, to name some of the more important and relevant disciplines and professions, all occupy the world of librarianship.

Perhaps the most important hallmark librarianship is its value of universal access, and a deep and commitment to public service, without discrimination, as a basic right. Librarians also depend heavily on sharing worldwide practices, tools and bibliographic standards to preserve, process and find information regardless of political, economic, or social context or restraint. Worldwide coordination and information sharing is highly appreciated by everyone.

Because of their history and shared values, libraries, as well as other information-oriented social institutions such as museums and archives, have a tradition of:

- Listening carefully to people's concerns and needs, and acting accordingly;
- Going the "extra mile" to respond to the very personal needs of their citizen-patrons (or consumers/customers)—a practice begun in the very early, ancient libraries, where, for example, librarians maintained the clay tablets which kept track of the commercial trade of various patrons;
- Serving as a "cyberspace" niche for social and technological experimentation;
- Becoming community and national change agents, inventing new approaches and strategies, and evaluating the changes that are occurring in people's lives, and how to respond to them;
- Making information literacy a core element of their programs and activities, and educating the members of their communities to become information literate;
- Teaching other social institutions to build their own information literacy programs;
- Sharing the responsibility of maintaining and updating the informational capabilities of people;
- Promoting and organizing open discussion forums dealing with information literacy; and
- Training every member of the library staff to be a knowledgeable person in information literacy, and acquiring expertise by practicing, collaborating and sharing methodologies.

9. SUMMARY

In Chile, information literacy is not generally recognized as an important concept, much less a well thought-out strategy and plan of action. Having said that, we must concede that we can see steps being taken to gear up to using information and communication technologies in many local community level organizations in Chile. However, these are largely computer literacy and media literacy efforts. Information literacy activities are still isolated activities, and not an integral part of an overall, cohesive program. The only institutions in Chile that seem to have a sharp focus in information literacy are a few university libraries, especially the Catholic University.

If Chile wants to foster policies and programs in information literacy, action will depend largely on positioning the idea as an absolutely core, essential tool that people must acquire

to improve their working and everyday lives. Government policy-makers must highlight the importance of information literacy as a basic citizen right, necessary for the empowerment of every citizen, and necessary to meet the challenges of the future.

Articulating an enlightened set of information literacy public policies and programs must become a central, top level government priority, and will require very careful planning and a strategy to bring it about. The process of policy formulation must involve both public and private organizations and communities. The process will require well-designed local community programs that are customized to their special and unique needs and concerns. Focal community centers, whether telecenters, job centers, public libraries, or other institutions, must become safe and convenient places for people to receive training, where coaches and mentors can help them if needed, and where there is continuous evaluation of progress and identification of bottlenecks requiring resolution.

Libraries and librarians are well positioned to lead this initiative because they have a tradition and a well-earned reputation of service, the technical background and expertise for dealing with information, and a common language with other libraries nationally, regionally, and internationally, and the capacity for effecting strategic alliances and partnerships with other centers to confront the many problems of establishing information literacy programs together.

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<http://www.nclis.gov/libinter/infolitconf&meet/papers/ferreiro-fullpaper.pdf>

Footnotes

[i] Ms. Soledad Ferreiro, an entrepreneur in the world of Chilean librarianship and information services, has developed strategies for people, in different contexts, to develop and utilize new practices and build new relationships between information, knowledge and ICT technology. A librarian from the University of Chile, she has been university librarian for two library systems, network consultant, university professor, project writer and evaluator, library planning consultant for large libraries and architectural firms, children's and outreach librarian. Fifteen years in university libraries, four in public libraries in California, three setting RENIB, a national automated network, four years in international organizations, three years in government and two years as manager of an Internet based information services company. Currently, beginning four years ago, she is partner and owner of GyF, an information services consultant firm advising universities, libraries, businesses and public organizations.

[ii] Castells, Manuel. 2001. *The Internet Galaxy. Reflections on the Internet, Business, and Society*. New York, Oxford University Press.

[iii] Two jobs and the training the author received in the Club de Emprendedores (an Entrepreneurship Club) caused the author to drastically change her interpretation of librarianship and her style of interaction with clients. The four years as children's' and outreach librarian for Yolo County, California, in the early seventies, meant the author's coming into, without any formal training, public libraries in a world that had its own unique way of doing things which was substantially different from her history and sensibilities. She therefore had no other choice than to listen to the people, which made her produce new meaningful niches of possibilities and interaction for the county, including Mexican migrant workers and their children, as well as helping build the first Spanish collections for the public libraries of northern California. As a public worker accountable to the community, she incorporated in her life the value of client-orientation and universal access. A university librarian for the Catholic University in Chile, she was hired to transform the libraries to become the center of the university. As such, she was responsible in 1980, for the automation of all library processes, following the MARC format. These experiences forced her to adhere to international practices, and seek collaboration from the more developed countries as well as from Chilean librarian trained outside of Chile. She learned that libraries could not be isolated from other libraries, or from their institutional and client context, and that sharing was a form of growth, and that competing and collaborating go hand by hand. The learning process at the Club forced the author to change her consulting style and sensibilities. She was able to do this by becoming a better observer, listener, and by embodying new forms of interpersonal interaction through language, as well as having conscience that the future is a Cyberspace niche of possibilities that can be invented in the present from the traditions of the past. This experience is captured in the book *Disclosing New Worlds, Entrepreneurship, Democratic Action, and the Cultivation of Solidarity*, by Charles Spinosa (Fernando Flores and Hubert Dreyfuss, MIT Press, 1997).

[iv] This information was obtained from the Department of Studies of the Chamber of Commerce of Santiago, CCS (http://www.ccs.cl). The Information Technology Absorption Index 2001 includes education, infrastructure and telecom costs, PC density, Internet host density and Internet user density: United States, 144.9; Finland, 103.5; Singapore, 92.9; Japan, 87.4; Korea, 74.9; Latin American countries such as Chile, 35.2; Argentina, 33.1; Mexico, 21.6; and Peru, 19.

[v] A national program, coordinated by the Ministry of Education, that provides basic Internet and computer equipment to high schools (100%) and elementary schools (50%) nationwide (http://www.enlaces.cl). Currently it covers 90% of the total number of registered students.

[vi] An educational portal set with public and private funds and geared to schoolteachers, community, researchers and students (http://www.educar.cl).

[vii] http://www.dibam.cl

[viii] http://www.vitanet.cl

[ix] CDI Chile, Centro de Democratización de la Informática, a franchise from CDI Americas. This organization has schools of informatics and citizenship in Japan, Brazil, Mexico, Colombia, Uruguay and Chile. They use technology to promote citizen's values.

[x] http://www.paisdigital.cl

[xi] http://www.redcomunitaria.cl

[xii] http://www.elencuentro.cl

[xiii] A good case is the University Library System of the Pontifical Catholic University. Information can be obtained through her coordinator (agaete@puc.cl).

[xiv] Cartografía de initiatives de Internet para ciudadanos en Chile by Claudio Orrego and Rodrigo Araya. Study solicited by PNUD that analyses local Web contents and citizens' access to Internet through community organizations such as Telecentres, Infocentres, OMIL (Municipal office for employment), Cybercafe and Kiosks.

[xv] Bell, C. 1997. *Remembering the Future: Organizational Change: What Is It, and What Does It Mean for Record Professionals?* [keynote address]. Annual meeting of the National Association of Government Archivists and Records Administrators, Sacramento, CA. Available: http://www.barry.com/nagara1.html.

[xvi] This is related to the terrorist plane attacks suffered by the United States on 11 September 2001.